IN THE CLAIMS:

A complete listing of the claims and their status as of this Amendment is as follows:

1.(Currently amended) An impeller suitable for use in a centrifugal pump, for handling liquid mixtures containing particulate solids, the impeller including a front shroud having opposed faces, an outer peripheral edge portion and a rotation axis, a back shroud having opposed faces, an outer peripheral edge portion and a rotation axis, a plurality of pumping vanes ~~on one of the faces of~~ positioned between the front and back shroud and extending away from the rotation axis, each pumping vane having an outer peripheral edge portion, and a plurality of auxiliary vanes on the other face of ~~the~~ at least one shroud, the auxiliary vanes each having an outer edge portion, wherein the dimension Da from the rotation axis to the outer peripheral edge portion of the ~~shroud~~ shrouds is greater than the dimension Db from the rotation axis to the outer edge portion of the auxiliary vanes ~~Db~~ and wherein Da is greater than the dimension Dc from the rotation axis to the outer peripheral edge portion of the pumping vanes and wherein the dimension Da of the one of the shrouds is greater than the dimension Da of the other shroud.

Claims 2-3 (Cancelled)

4.(Currently amended) An impeller according to claim ~~3~~ 1 wherein ~~the impeller further includes a front shroud, the pumping vanes being between the front and back shrouds and~~ the auxiliary vanes ~~being~~ are located on the other face of one of the shrouds.

5.(Currently amended) An impeller according to claim ~~3~~ 1 wherein the impeller further ~~includes a front shroud, the pumping vanes being between the front and back shrouds and the~~ comprises auxiliary vanes being positioned on the other face of each

of the ~~shrouds~~ front shroud and back shroud.

6.(Currently amended) An impeller according to claim ~~4~~ 1 wherein the dimension Da of the front shroud is greater than the ~~dimensions Db and Dc~~ dimension Da′ of the back shroud.

7.(Currently amended) An impeller according to claim ~~4~~ 1 wherein the dimension ~~Da~~ Da′ of the back shroud is greater than the ~~dimensions Db and Dc~~ dimension Da of the front shroud.

Claims 8-11 (Cancelled)

12.(Currently amended) An impeller according to claim ~~6~~ 1 wherein Db and Dc are substantially the same.

13.(Currently amended) An impeller according to claim ~~12~~ 1 wherein Db and Dc are within 5% of each other.

14.(Currently amended) An impeller according to claim ~~13~~ 1 wherein Db is less than 0.95 Da.

15.(Original) An impeller according to claim 14 wherein Db/Da is from 0.65 to 0.95.

16.(Original) An impeller according to claim 14 wherein Db/Da is from 0.65 to 0.9.

17.(New) An impeller suitable for use in a centrifugal pump, for handling liquid

mixtures containing particulate solids, the impeller including at least one shroud having opposed faces, an outer peripheral edge portion and a rotation axis, a plurality of pumping vanes on one of the faces of said at least one shroud extending away from the rotation axis, each pumping vane having an outer peripheral edge portion, and a plurality of auxiliary vanes on the other opposing face of said at least one shroud, the auxiliary vanes each having an outer edge that is oriented at an angle Z to a line parallel to the rotation axis, and wherein the dimension Da defined by the distance from the rotation axis to the outer peripheral edge portion of said at least one shroud is greater than the dimension Db defined by the distance from the rotation axis to the outer edge of the auxiliary vanes, and wherein Da is greater than the dimension Dc defined by the distance from the rotation axis to the outer peripheral edge portion of the pumping vanes.

18.(New) The impeller of claim 17 wherein said angle Z of said outer edge of said auxiliary vanes is about 45°.

19.(New) The impeller of claim 17 wherein said at least one shroud further comprises a front shroud and a back shroud.

20.(New) The impeller of claim 19 further comprising auxiliary vanes on both said front shroud and said back shroud.

21.(New) The impeller of claim 19 wherein said front shroud has a diameter Da and said back shroud has a diameter Da′, and the dimension Da is greater than Da′.

22.(New) The impeller of claim 19 wherein said front shroud has a diameter Da and said back shroud has a diameter Da′, and the dimension Da′ is greater than Da.

23.(New) The impeller of claim 19 wherein said front shroud has a diameter Da and said back shroud has a diameter Da′, and the dimensions of Da and Da′ are both greater than the dimension Db.

24.(New) The impeller of claim 17 wherein the dimension Db is approximately the same as the dimension Dc.

25.(New) The impeller of claim 17 wherein the dimension Db is within 5% of the dimension Dc.

26.(New) The impeller of claim 17 wherein said dimension Db is between 65% to 95% of the dimension Da of said at least one shroud.